

IN THE CLAIMS

This listing of claims will replace all prior versions and listing of claims in the application:

Claims 1-11. Canceled

12. (currently amended) A solar collector for converting light incident thereon into electrical energy, comprising a first substrate, a second substrate and a third substrate, each substrate having a photovoltaic cell formed on a surface thereof, the surfaces of the first, second and third substrates being oriented at angles relative to each other and to a direction of propagation of light incident on the solar collector such that light incident on the solar collector and reflected from the first substrate can be reflected directly onto the surface of the second and third substrates so as to enhance the efficiency of the solar collector.

13. (previously presented) A solar collector according to claim 12, wherein each of the first, second and third substrates has an edge proximal to an edge of at least one other substrate.

14. (previously presented) A solar collector according to claim 13, wherein the surfaces of the first, second and third substrates are shaped and oriented relative to one another such that the surfaces form at least part of a concave inner surface of a polyhedron.

15. (previously presented) A solar collector according to claim 14, wherein the surfaces of the first, second and third substrates form at least part of first, second and third inner surfaces of an inverted three sided pyramid.

16. (currently amended) A solar collector according to claim 15, wherein each of the first, second and third inner substrates has the shape of an isosceles triangle form at least part of a structure having an opening for receiving the light, the structure being free of light-blocking elements between the opening and the first, second and third substrates.

17. (previously presented) A solar collector according to claim 14, further comprising a fourth substrate having a photovoltaic cell formed on the surface thereof, the surfaces of the first, second, third and fourth substrates being oriented at angles relative to each other and to a light ray incident on the surface of the first substrate such that light reflected from the first substrate is reflected onto the surface of the fourth substrate.

18. (previously presented) A solar collector according to claim 17, wherein the surfaces of the second, third and fourth substrates are oriented to receive light thereon, the second, third and fourth substrates being oriented such that light reflected from the second substrate is reflected onto the surface of at least one of the first, third and fourth substrates, light reflected from the third substrate is reflected onto the surfaces of at least one of the first, second and fourth substrates and light reflected from the fourth substrate is reflected onto the surfaces of at least one of the first, second and third substrates.

19. (previously presented) A solar collector according to claim 17, wherein each of the first, second, third and fourth substrates has an edge proximal to an edge of at least one other substrate.

20. (previously presented) A solar collector according to claim 17, wherein the surfaces of the first, second, third and fourth substrates form at least part of first, second, third and fourth inner surfaces of an inverted four sided pyramid.

21. (currently amended) A solar collector according to claim 20, wherein each of the first, second, third and fourth inner substrates surfaces has the shape of an isosceles triangles.

22. (previously presented) A solar collector according to claim 14, further comprising fourth, fifth and sixth substrates having a photovoltaic cell formed on a surface thereof, the surfaces of the first, second, third, fourth and fifth substrates being oriented at angles relative to each other to form at least part of inner side surfaces of an inverted polyhedron having a pentagonal cross-section, the sixth substrate forming an inner bottom surface of the inverted polyhedron.

23. (previously presented) A solar collector according to claim 12, wherein each of the plurality of substrates has a single monolithic photovoltaic cell formed on the surface thereof.

24. (previously presented) A solar collector according to claim 12, wherein the photovoltaic cells formed on the surfaces of the plurality of substrates each have at least two different types of photovoltaic cells selected from the group consisting of Silicon based photovoltaic cells, Gallium-Arsenide based photovoltaic cells, Aluminum-Gallium-Arsenide based photovoltaic cells, Germanium based photovoltaic cells and Gallium Indium-Phosphide based photovoltaic cells.

25. (previously presented) A solar collector according to claim 12, wherein the photovoltaic cells formed on the surfaces of the plurality of substrates each include at least one photovoltaic cell having a multiple-junction photovoltaic cell.

Claims 26-27. (cancelled)

28. (currently amended) A solar collector comprising a base and a plurality of at least three photovoltaic cells extending upwardly from the base and disposed about and facing a centerline extending upwardly from the base, each of the photovoltaic cells extending away from the centerline as it extends upwardly from the base for converting light incident thereon into electrical energy, comprising a first substrate, a second substrate and a third substrate, each substrate having a photovoltaic cell formed on a surface thereof, the surfaces of the first, second and third substrates being oriented to a direction of propagation of light incident on the solar collector and forming at least part of first, second and third inner surfaces of an inverted three sided pyramid such that light incident on the solar collector and reflected from the first substrate can be reflected onto the surface of the second and third substrates so as to enhance the efficiency of the solar collector.

29. (currently amended) A solar collector according to Claim 28, wherein each of the plurality of photovoltaic cells is triangular in shape first, second and third inner surfaces has the shape of an isosceles triangle.

30. (currently amended) A solar collector according to Claim 29, wherein the plurality of photovoltaic cells intersect the centerline at a point for converting light incident thereon into electrical energy, comprising a first substrate, a second substrate, a third substrate and a fourth substrate, each substrate having a photovoltaic cell formed on a surface thereof, the surfaces of the first, second, third and fourth substrates being oriented to a direction of propagation of light incident on the solar collector and forming at least part of first, second, third and fourth inner surfaces of an inverted four sided pyramid such that light incident on the solar collector and reflected from the first substrate can be reflected onto the surface of the second, third and fourth substrates so as to enhance the efficiency of the solar collector.

31. (currently amended) A solar collector according to Claim 28, wherein each of the plurality of photovoltaic cells intersects the centerline first, second, third and fourth inner surfaces has the shape of an isosceles triangles.

32. (currently amended) A solar collector according to Claim 28, wherein each of the plurality of photovoltaic cells extends in a plane, the plane of each of the plurality of photovoltaic cells intersecting the centerline for converting light incident thereon into electrical energy, comprising a first substrate, a second substrate, a third substrate, a fourth substrate, a fifth substrate and a sixth substrate, each substrate having a photovoltaic cell formed on a surface thereof, the surfaces of the first, second, third, fourth and fifth substrates being oriented at angles relative to each other to form at least part of inner side surfaces of an inverted polyhedron having a pentagonal cross-section and the sixth substrate forming an inner bottom surface of the inverted polyhedron, the surfaces of the first, second, third, fourth, fifth and sixth substrates being oriented to a direction of propagation of light incident on the solar collector such that light incident on the solar collector and reflected from the first substrate can be reflected onto the surface of the second, third, fourth, fifth and sixth substrates so as to enhance the efficiency of the solar collector.

Claims 33-43. (cancelled)